From: Archer, Spencer

To: Zion, Rodney E CIV USARMY CENWS (US)

Cc: Reitter, Eric T; garyfulton@ferconinc.com; Projectmail - Bunker Hill CTP_USACE; Bevier, Marie L; Kunas, Karl J

CIV USARMY CENWS (US); Hand, Charles; Moreen, Ed

Subject: Bunker Hill - Weekly O&M Update (30 July)

Date: Thursday, August 02, 2018 3:40:42 PM

Attachments: <u>image001.png</u>

BHCTP Data (7-24 to 7-30).xls

Rod.

The weekly Bunker Hill Central Treatment Plant (CTP) and Kellogg Tunnel (KT) data package is attached for your review. Charles will send the weekly updates starting next week (b) (6)

(b) (6)

CTP Operations:

- Reactor pH: The pH set point was decreased from 8.4 to 8.3 July 25 and remained at 8.3 during the remainder of this reporting period
- 006 Effluent Zinc (Average): 0.261 mg/L (n = 3, July 20 July 25)
- 006 Effluent pH (Average): 6.97 s.u. (n = 3, July 20 July 25)
- 006 Effluent Turbidity (Average): 0.68 NTU (n = 7, July 24 July 30)
- Average Monthly Lime Usage (July): 3.91 tons per day
- Flocculant Dose: Flocculant dose remained at 1.6 ppm during this reporting period

Kellogg Tunnel:

- KT Flow: Currently estimated at 1,740 gpm at this time
- KT Zinc: 155 mg/L (n = 7, July 9 July 30)
- KT pH: 2.94 s.u. (Lab n = 7, July 9 July 30) 2.91s.u. (Lab - n = 2, July 26, July 30)
- The mine pool pump was removed from service at 11:30 on Wednesday July 25 and placed back into service at 13:30
- The mine performed an in mine diversion test during this period

Lined Pond:

• Current Volume: 1.00 MG

Additional Items:

- Lime loop #1 and #2 were flushed and prepared to install Temporary Treatment System connection
- Schedule 80 discharge pipe was installed on lime slurry pump #1
- Lime usage increased to approximately 5 TPD during Bunker Hill Mine ditch cleaning last week
- CDA Trust well development water disposal will begin Tuesday July 31 o CTP operators will provide initial disposal training and lined pond security training
- AMD line pigging and annual video inspections scheduled for August 14 August 16
 o The BH mine managers have agreed to remove the mine pool pump from service
 for the scheduled pigging event

Thanks,

Spencer Thomas Archer, P.E., BCEE

Mobile: +1 805 550 4050 **www.woodplc.com**



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